

Precision Guided Parafoil System For Sounding Rocket Recovery, Phase I

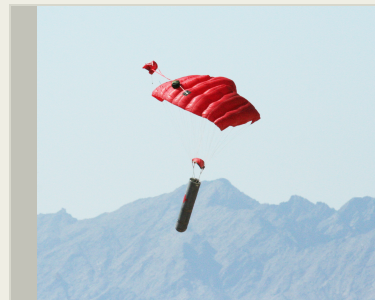
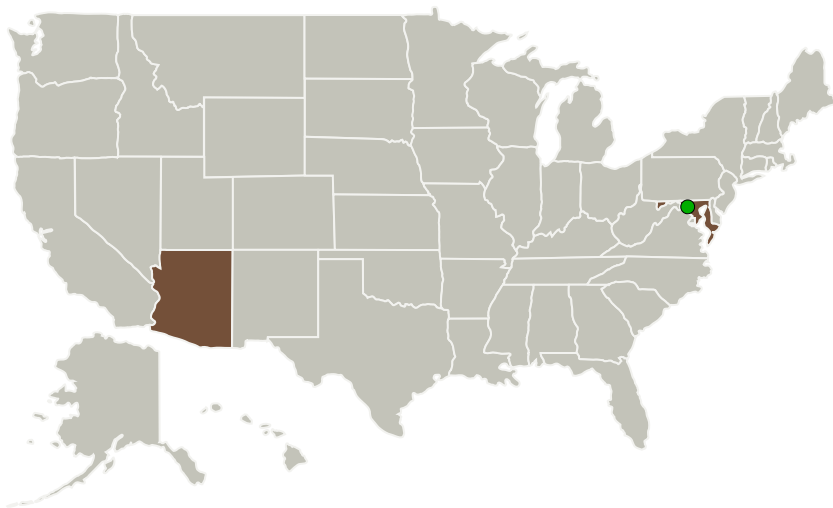
Completed Technology Project (2015 - 2015)



Project Introduction

The primary goal of the proposed STARA innovation is to develop and demonstrate a high-altitude precision guided parafoil system that will enable NASA to control the final landing point of the sounding rocket payload, thus reducing system offset, recovery time, and recovery cost. Current recovery methods utilize unguided parachutes, which are susceptible to large uncertainties in recovery locations due to unforeseen variables. Using a precision guided parafoil system deployed at high altitudes would enable the landing of the payload at a defined location. This innovation will include a ruggedized satellite based telemetry system to assist in recovery efforts.


Primary U.S. Work Locations and Key Partners



Precision Guided Parafoil System For Sounding Rocket Recovery, Phase I

Table of Contents

Project Introduction	1
Primary U.S. Work Locations and Key Partners	1
Project Transitions	2
Images	2
Organizational Responsibility	2
Project Management	2
Technology Maturity (TRL)	2
Technology Areas	3
Target Destinations	3

Organizations Performing Work	Role	Type	Location
STARA Technologies Corporation	Lead Organization	Industry	Gilbert, Arizona
 Goddard Space Flight Center(GSFC)	Supporting Organization	NASA Center	Greenbelt, Maryland

Primary U.S. Work Locations


Arizona	Maryland
---------	----------

Precision Guided Parafoil System For Sounding Rocket Recovery, Phase I

Completed Technology Project (2015 - 2015)



Project Transitions

 **June 2015:** Project Start

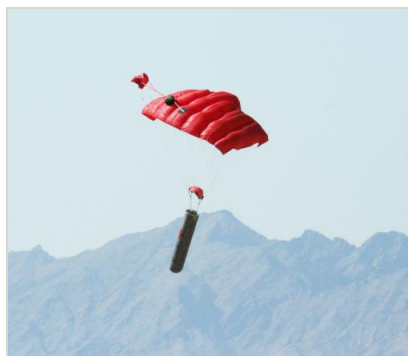
 **December 2015:** Closed out

Closeout Summary: Precision Guided Parafoil System For Sounding Rocket Recovery, Phase I Project Image

Closeout Documentation:

- Final Summary Chart Image(<https://techport.nasa.gov/file/139232>)

Images



Briefing Chart Image

Precision Guided Parafoil System
For Sounding Rocket Recovery,
Phase I

(<https://techport.nasa.gov/image/128095>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

STARA Technologies Corporation

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

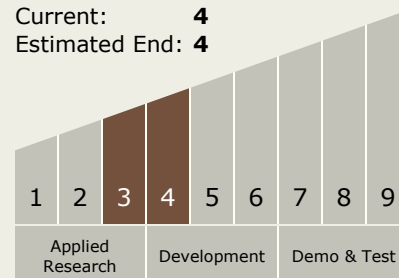
Carlos Torrez

Principal Investigator:

Glen R Bailey

Technology Maturity (TRL)

Start: **3**
Current: **4**
Estimated End: **4**



Precision Guided Parafoil System For Sounding Rocket Recovery, Phase I

Completed Technology Project (2015 - 2015)



Technology Areas

Primary:

- TX09 Entry, Descent, and Landing
 - └ TX09.2 Descent
 - └ TX09.2.1 Aerodynamic Decelerators

Target Destinations

The Sun, Earth, The Moon,
Mars, Others Inside the Solar
System, Outside the Solar
System